

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/586,742  
Source: 1 FWO  
Date Processed by STIC: 1/19/07

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 01/19/2007

PATENT APPLICATION: US/10/586,742

TIME: 16:16:00

Input Set : A:\128497 sequence listing.txt

Output Set: N:\CRF4\01192007\J586742.raw

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3 <110> APPLICANT: Marche, Patrice
4      Rolland, Alexandre
5      Jouvin-Marche, Evelyne
6      Perron, Herve
8 <120> TITLE OF INVENTION: Composition for Treating Pathology Associated with
MSRV/HERV-W
10 <130> FILE REFERENCE: 128497
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/586,742
C--> 13 <141> CURRENT FILING DATE: 2006-07-21
15 <160> NUMBER OF SEQ ID NOS: 5
17 <170> SOFTWARE: PatentIn version 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 287
21 <212> TYPE: PRT
22 <213> ORGANISM: virus - MSRV/HERV-W
24 <400> SEQUENCE: 1
26 Ser Ser Ser Pro Tyr Gln Glu Phe Leu Trp Arg Thr Arg Leu Pro Gly
27 1      5      10      15
30 Asn Ile Asp Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Asn Ser Thr
31      20      25      30
34 Phe Thr Ala His Thr His Met Pro Arg Asn Cys Tyr Asn Ser Ala Thr
35      35      40      45
38 Leu Cys Met His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn
39      50      55      60
42 Pro Ser Cys Pro Gly Gly Leu Gly Ala Thr Val Cys Trp Thr Tyr Phe
43 65      70      75      80
46 Thr His Thr Ser Met Ser Asp Gly Gly Gly Ile Gln Gly Gln Ala Arg
47      85      90      95
50 Glu Lys Gln Val Lys Glu Ala Ile Ser Gln Leu Thr Arg Gly His Ser
51      100     105     110
54 Thr Pro Ser Pro Tyr Lys Gly Leu Val Leu Ser Lys Leu His Glu Thr
55      115     120     125
58 Leu Arg Thr His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr
59      130     135     140
62 Arg Leu His Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Met Cys
63 145     150     155     160
66 Leu Pro Leu His Phe Arg Pro Tyr Ile Ser Ile Pro Val Pro Glu Gln
67      165     170     175
70 Trp Asn Asn Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly
71      180     185     190
74 Pro Leu Val Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys
75      195     200     205
78 Val Lys Phe Ser Asn Thr Ile Asp Thr Thr Ser Ser Gln Cys Ile Arg
79      210     215     220

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82 Trp Val Thr Pro Pro Thr Arg Ile Val Cys Leu Pro Ser Gly Ile Phe
83 225                230                235                240
86 Phe Val Cys Gly Thr Ser Ala Tyr His Cys Leu Asn Gly Ser Ser Glu
87                245                250                255
90 Ser Met Cys Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr
91                260                265                270
94 Glu Gln Asp Leu Tyr Asn His Val Val Pro Lys Pro His Asn Lys
95                275                280                285
98 <210> SEQ ID NO: 2
99 <211> LENGTH: 29
100 <212> TYPE: PRT
101 <213> ORGANISM: virus - MSRV/HERV-W
103 <400> SEQUENCE: 2
105 Met Ala Leu Pro Tyr His Thr Phe Leu Phe Thr Val Leu Leu Pro Pro
106 1                5                10                15
109 Phe Ala Leu Thr Ala Pro Pro Pro Cys Cys Cys Thr Thr
110                20                25
113 <210> SEQ ID NO: 3
114 <211> LENGTH: 316
115 <212> TYPE: PRT
116 <213> ORGANISM: virus - HSRV/HERV-W
118 <400> SEQUENCE: 3
120 Met Ala Leu Pro Tyr His Thr Phe Leu Phe Thr Val Leu Leu Pro Pro
121 1                5                10                15
124 Phe Ala Leu Thr Ala Pro Pro Pro Cys Cys Cys Thr Thr Ser Ser Ser
125                20                25                30
128 Pro Tyr Gln Glu Phe Leu Trp Arg Thr Arg Leu Pro Gly Asn Ile Asp
129                35                40                45
132 Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Asn Ser Thr Phe Thr Ala
133                50                55                60
136 His Thr His Met Pro Arg Asn Cys Tyr Asn Ser Ala Thr Leu Cys Met
137 65                70                75                80
140 His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
141                85                90                95
144 Pro Gly Gly Leu Gly Ala Thr Val Cys Trp Thr Tyr Phe Thr His Thr
145                100               105               110
148 Ser Met Ser Asp Gly Gly Gly Ile Gln Gly Gln Ala Arg Glu Lys Gln
149                115               120               125
152 Val Lys Glu Ala Ile Ser Gln Leu Thr Arg Gly His Ser Thr Pro Ser
153                130               135               140
156 Pro Tyr Lys Gly Leu Val Leu Ser Lys Leu His Glu Thr Leu Arg Thr
157 145               150               155               160
160 His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Arg Leu His
161                165               170               175
164 Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Met Cys Leu Pro Leu
165                180               185               190
168 His Phe Arg Pro Tyr Ile Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
169                195               200               205
172 Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val

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```

173      210      215      220
176 Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Lys Phe
177 225      230      235      240
180 Ser Asn Thr Ile Asp Thr Thr Ser Ser Gln Cys Ile Arg Trp Val Thr
181      245      250      255
184 Pro Pro Thr Arg Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
185      260      265      270
188 Gly Thr Ser Ala Tyr His Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
189      275      280      285
192 Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
193      290      295      300
196 Leu Tyr Asn His Val Val Pro Lys Pro His Asn Lys
197 305      310      315
200 <210> SEQ ID NO: 4
201 <211> LENGTH: 538
202 <212> TYPE: PRT
203 <213> ORGANISM: virus - HERV-W7q
205 <400> SEQUENCE: 4
207 Met Ala Leu Pro Tyr His Ile Phe Leu Phe Thr Val Leu Leu Pro Ser
208 1      5      10      15
211 Phe Thr Leu Thr Ala Pro Pro Pro Cys Arg Cys Met Thr Ser Ser Ser
212      20      25      30
215 Pro Tyr Gln Glu Phe Leu Trp Arg Met Gln Arg Pro Gly Asn Ile Asp
216      35      40      45
219 Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Thr Pro Thr Phe Thr Ala
220      50      55      60
223 His Thr His Met Pro Arg Asn Cys Tyr His Ser Ala Thr Leu Cys Met
224 65      70      75      80
227 His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
228      85      90      95
231 Pro Gly Gly Leu Gly Val Thr Val Cys Trp Thr Tyr Phe Thr Gln Thr
232      100      105      110
235 Gly Met Ser Asp Gly Gly Gly Val Gln Asp Gln Ala Arg Glu Lys His
236      115      120      125
239 Val Lys Glu Val Ile Ser Gln Leu Thr Arg Val His Gly Thr Ser Ser
240      130      135      140
243 Pro Tyr Lys Gly Leu Asp Leu Ser Lys Leu His Glu Thr Leu Arg Thr
244 145      150      155      160
247 His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Gly Leu His
248      165      170      175
251 Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Ile Cys Leu Pro Leu
252      180      185      190
255 Asn Phe Arg Pro Tyr Val Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
256      195      200      205
259 Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val
260      210      215      220
263 Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Leu Phe
264 225      230      235      240
267 Ser Asn Thr Thr Tyr Thr Thr Asn Ser Gln Cys Ile Arg Tyr Val Thr

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```

268          245          250          255
271 Pro Pro Thr Gln Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
272          260          265          270
275 Gly Thr Ser Ala Tyr Arg Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
276          275          280          285
279 Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
280          290          295          300
283 Leu Tyr Ser Tyr Val Ile Ser Lys Pro Arg Asn Lys Arg Val Pro Ile
284 305          310          315          320
287 Leu Pro Phe Val Ile Gly Ala Gly Val Leu Gly Ala Leu Gly Thr Gly
288          325          330          335
291 Ile Gly Gly Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu Ser Gln
292          340          345          350
295 Glu Leu Asn Gly Asp Met Glu Arg Val Ala Asp Ser Leu Val Thr Leu
296          355          360          365
299 Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Gln Asn Arg Arg
300          370          375          380
303 Ala Leu Asp Leu Leu Thr Ala Cys Arg Gly Gly Thr Cys Leu Phe Leu
304 385          390          395          400
307 Gly Glu Glu Cys Cys Thr Thr Val Asn Gln Ser Gly Ile Val Thr Glu
308          405          410          415
311 Lys Val Lys Glu Ile Arg Asp Arg Ile Gln Arg Arg Ala Glu Glu Leu
312          420          425          430
315 Arg Asn Thr Gly Pro Trp Gly Leu Leu Ser Gln Trp Met Pro Trp Ile
316          435          440          445
319 Leu Pro Phe Leu Gly Pro Leu Ala Ala Ile Ile Leu Leu Leu Phe
320          450          455          460
323 Gly Pro Cys Ile Phe Asn Leu Leu Val Asn Phe Val Ser Ser Arg Ile
324 465          470          475          480
327 Glu Ala Val Lys Leu Gln Met Glu Pro Lys Met Gln Ser Lys Thr Lys
328          485          490          495
331 Ile Tyr Arg Arg Pro Leu Asp Arg Pro Ala Ser Pro Arg Ser Asp Val
332          500          505          510
335 Asn Asp Ile Lys Gly Thr Pro Pro Glu Glu Ile Ser Ala Ala Gln Pro
336          515          520          525
339 Leu Leu Arg Pro Asn Ser Ala Gly Ser Ser
340          530          535
343 <210> SEQ ID NO: 5
344 <211> LENGTH: 542
345 <212> TYPE: PRT
346 <213> ORGANISM: virus - MSRV
348 <400> SEQUENCE: 5
350 Met Ala Leu Pro Tyr His Thr Phe Leu Phe Thr Val Leu Leu Pro Pro
351 1          5          10          15
354 Phe Ala Leu Thr Ala Pro Pro Pro Cys Cys Thr Thr Ser Ser Ser
355          20          25          30
358 Pro Tyr Gln Glu Phe Leu Trp Arg Thr Arg Leu Pro Gly Asn Ile Asp
359          35          40          45
362 Ala Pro Ser Tyr Arg Ser Leu Ser Lys Gly Asn Ser Thr Phe Thr Ala

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```

363      50      55      60
366 His Thr His Met Pro Arg Asn Cys Tyr Asn Ser Ala Thr Leu Cys Met
367 65      70      75      80
370 His Ala Asn Thr His Tyr Trp Thr Gly Lys Met Ile Asn Pro Ser Cys
371      85      90      95
374 Pro Gly Gly Leu Gly Ala Thr Val Cys Trp Thr Tyr Phe Thr His Thr
375      100      105      110
378 Ser Met Ser Asp Gly Gly Gly Ile Gln Gly Gln Ala Arg Glu Lys Gln
379      115      120      125
382 Val Lys Glu Ala Ile Ser Gln Leu Thr Arg Gly His Ser Thr Pro Ser
383      130      135      140
386 Pro Tyr Lys Gly Leu Val Leu Ser Lys Leu His Glu Thr Leu Arg Thr
387 145      150      155      160
390 His Thr Arg Leu Val Ser Leu Phe Asn Thr Thr Leu Thr Arg Leu His
391      165      170      175
394 Glu Val Ser Ala Gln Asn Pro Thr Asn Cys Trp Met Cys Leu Pro Leu
395      180      185      190
398 His Phe Arg Pro Tyr Ile Ser Ile Pro Val Pro Glu Gln Trp Asn Asn
399      195      200      205
402 Phe Ser Thr Glu Ile Asn Thr Thr Ser Val Leu Val Gly Pro Leu Val
403      210      215      220
406 Ser Asn Leu Glu Ile Thr His Thr Ser Asn Leu Thr Cys Val Leu Phe
407 225      230      235      240
410 Ser Asn Thr Ile Asp Thr Thr Ser Ser Gln Cys Ile Arg Tyr Val Thr
411      245      250      255
414 Pro Pro Thr Arg Ile Val Cys Leu Pro Ser Gly Ile Phe Phe Val Cys
415      260      265      270
418 Gly Thr Ser Ala Tyr His Cys Leu Asn Gly Ser Ser Glu Ser Met Cys
419      275      280      285
422 Phe Leu Ser Phe Leu Val Pro Pro Met Thr Ile Tyr Thr Glu Gln Asp
423      290      295      300
426 Leu Tyr Asn His Val Val Pro Lys Pro His Asn Lys Arg Val Pro Ile
427 305      310      315      320
430 Leu Pro Phe Val Ile Arg Ala Gly Val Leu Gly Arg Leu Gly Thr Gly
431      325      330      335
434 Ile Gly Ser Ile Thr Thr Ser Thr Gln Phe Tyr Tyr Lys Leu Ser Gln
435      340      345      350
438 Glu Ile Asn Gly Asp Met Glu Gln Val Thr Asp Ser Leu Val Thr Leu
439      355      360      365
442 Gln Asp Gln Leu Asn Ser Leu Ala Ala Val Val Leu Gln Asn Arg Arg
443      370      375      380
446 Ala Leu Asp Leu Leu Thr Ala Lys Arg Gly Gly Thr Cys Leu Phe Leu
447 385      390      395      400
450 Gly Glu Glu Arg Cys Thr Thr Val Asn Gln Ser Arg Ile Val Thr Glu
451      405      410      415
454 Lys Val Lys Glu Ile Arg Asp Arg Ile Gln Cys Arg Ala Glu Glu Leu
455      420      425      430
458 Gln Asn Thr Cys Arg Trp Gly Leu Leu Ser Gln Trp Met Pro Trp Thr
459      435      440      445

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VERIFICATION SUMMARY

DATE: 01/19/2007

PATENT APPLICATION: US/10/586,742

TIME: 16:16:01

Input Set : A:\128497 sequence listing.txt

Output Set: N:\CRF4\01192007\J586742.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date